

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III** 1650 Arch Street

Philadelphia, Pennsylvania 19103-2029

September 4, 2007

Commander (B 046) Marine Corps Base Attn: Mr. Jeff Gardner 3250 Catlin Avenue Quantico, VA 22134-5001

Re: Draft Environmental Impact Statement for Development of the Westside of Marine Corps Base Quantico, Including the 2005 Base Realignment and Closure Action (CEQ #20070304)

Dear Mr. Gardner:

In accordance with the National Environmental Policy Act of 1969 and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement for Development of the Westside of Marine Corps Base Quantico, Including the 2005 Base Realignment and Closure Action in Quantico, Virginia. As a result of this review, EPA has assigned all alternatives of this Draft Environmental Impact Statement (DEIS) a rating of EC-2 (Environmental Concerns/Insufficient Information), which indicates that we have environmental concerns regarding the proposal and that there is insufficient information in the document to fully assess the environmental impacts of the project. A copy of EPA's ranking system is enclosed for your information.

The purpose of the DEIS is two-fold: 1) to address the 2005 BRAC law which directs co-location of the Military Department Investigative Agency Headquarters with the Counterintelligence Field Activity and Defense Security Service at Marine Corps Base Quantico (MCBQ) by 2011 and 2) the need for facilities to support Marine Corps units currently on Mainside to accommodate growth, to provide for consolidation of personnel located elsewhere, and to replace inadequate facilities. The proposed actions and alternatives in the DEIS attempt to provide necessary facilities in the proposed development areas to accommodate organizations and their personnel relocating to or within MCBQ, including relocations required by the 2005 BRAC law.

There are two alternatives presented, each having two options. They are:

Alternative A, the BRAC Action, would add only development required to accommodate those personnel (approximately 3,000) associated with the BRAC 2005 action. Alternative A **BRAC Option 1 (Russell Road)** would site the entire BRAC development in the Southern Russell Road Site. Alternative A BRAC Option 2 (MCB-1) would site the entire BRAC development in the Northern MCB-1 Site along Hotpatch Road.

Alternative B, 5000 Personnel, Including BRAC would add 5,000 personnel to work in the Westside, including BRAC personnel (the additional 2,000 personnel would result from relocating existing units already at MCBQ. Alternative B BRAC Option 1 (Russell Road) would site the entire BRAC development in the Southern Russell Road Site, the remainder of the development for the additional 2,000 personnel would be sited in the MCB-1 Area, including approximately 300 potential at the Weapons Training Battalion Site (WTBN). Alternative B **BRAC Option 2 (MCB-1)** would site the entire BRAC development in the Northern MCB-1 Site along Hotpatch Road. The remaining development for 2,000 personnel could be completely sited in the Southern Russell Road Site, or split between the two areas in some combination. Development for 300 personnel would be considered for the WTBN.

When considering the alternatives and options presented, it is in the best interest of the environment to choose the locations for development that have the least environmental impacts. Alternative A would impact 70 acres of forested habitat and have an increase of 49 acres of impervious surfaces. Alternative B would impact 148 acres of forested habitat and increase impervious surfaces by 77 acres. When comparing options, it is apparent that Option 2 (MCB-1) under either alternative would be more likely to avoid or have fewer impacts to wetlands or waters (0.39 acres) of the U.S. compared to Option 1 (Russell Road) (11 acres). However, impacts to forested areas are far greater with Alternative B despite the remaining acreage of forested areas left. Considering purpose and need and weighing the environmental impacts is critical in the environmental analysis. Therefore, EPA is specifically concerned with impacts to wetlands and forested habitat and requests that the following information be addressed in the Final Environmental Impact Statement (FEIS).

Wetlands/Water Resources

Implementation of Alternatives A and B would require expansion of the bridge over Chopawamsic Creek. Option 1 (Russell Road) under either Alternative A or B could involve crossing and/or filling for ravines and associated waters of the U.S. The FEIS should explain and quantify the area proposed for filling.

As stated on page 4-79, "Russell Road would be expanded, which could impact a wetland along Chopawamsic Creek outside of the Russell Road Area. This wetland is located approximately 60 feet from the Russell Road Bridge, and would not be likely to be filled. However, portions of the RPA would be affected, and mitigation may be necessary." The FEIS should describe and quantify the buffer to be impacted.

It is stated on page 2-29, "In addition, placement of fill in wetlands or buffers might be necessary to accommodate development of individual project components. The need to place fill in wetland habitats would be determined on a case-by-case basis, as project components are planned and programmed." EPA questions whether the wetland impact can be greater than projected. Thus, the FEIS should describe number, size, and location of the potential impacted wetland areas.

EPA acknowledges and appreciates the Navy's mitigation policy for wetland impact which is a ratio of 1:1 replacement knowing that regulatory agencies could require a greater ratio, dependent on wetland type and function. MCBQ also maintains mitigation banking as one means to accomplish mitigation.

Forested Vegetation

The loss of forested vegetation for Alternative A is approximately 70 acres and 148 acres for Alternative B. The loss of forested acreage is considered small compared to the remaining forested areas. However, it is important to note the significance of forested wetland systems. These systems are considered to be valuable as they act as natural filters and sediment traps and absorb flood waters. They provide vital ecological functions that are critical to several wetland dependent animal and plant species. Wetland impacts should be avoided to the maximum extent practical and be properly protected. EPA's mandates include the preservation of these environmentally significant values and functions. Alternatives are available that must be explored as part of the process to avoid these functioning systems. Although the loss of forested areas may seem insignificant compared to what remains, EPA suggests implementing measures for mitigation, if possible.

Biological Resources/Threatened Species Measures

Page 2-24/2-30, "Proposed development under all alternatives and options would avoid areas containing the federally-threatened small whorled pogonia, or its designated protection zone, although the widening of Russell Road proposed for traffic improvement would extend into the protection zone for the small whorled pogonia." The FEIS should quantify the size of the impacted protection zone and possibly depict the area on a map. A discussion of the impact to the small whorled pogonia should be provided if the protection zone is impacted.

Page 3-16, "An inventory of fish distribution and habitat quality in MCBQ streams was conducted in 1988 by the USFWS." Of the data collected, no rare or endangered fish species were detected. Although stream banks were stable and most sedimentation present in the streams appeared to have originated from activities away from the streams in addition to dams trapping sediment and enhancing water quality, EPA questions the present condition of the streams as the data is almost 20 years old.

Floodplains

Page 3-17, Since Russell Road crosses the 100-year floodplain associated with Chopawamsic Creek north of the Russell Road study area; EPA suggests coordination with the Federal Emergency Management Agency (FEMA). Federal Executive Order 11988 (Floodplain Management) states, "If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplain." Where no practicable alternatives exist, Executive Order 11988 goes on to state, "If property used by the general public has suffered flood damage or is located in an identified flood hazard area, the responsible agency shall provide on structures, and other places where appropriate, conspicuous delineation of past and probable flood height in order to enhance public awareness and knowledge about flood hazards." To promote public safety, we recommend that at a minimum, a permit condition be included to require conspicuous delineation of past and probable future flood heights at multiple locations across the project site. These signs should be in place within six months or permit issuance.

Energy Efficiency

This project presents an excellent opportunity to implement the President's Executive Order 13423: Strengthening Federal Environment, Energy and Transportation Management by incorporating energy efficiency into the construction efforts for this project. Enclosed with this letter is information that EPA recommends the MCBQ consider when planning the construction phase of this project.

Low Impact Development

As stated on pages 4-38 and 4-40, "All projects would be required to comply with state and federal stormwater guidelines as well as installation guidance; resulting measures implemented during both construction and operation would ensure that impacts would not be significant." EPA suggests that Low Impact Development (LID) practices be incorporated into the design of the proposed action. Development results in the loss of trees and other vegetation, the compaction of soils by heavy equipment and the creation of stretches of connected impervious areas. These combined factors are extremely difficult to compensate for using traditional practices. Prior to the development of any structural stormwater practices on a site, significant reductions in stormwater quantity and quality impacts can be made through enhancements to site design. As a result, LID site design goals and planning practices should be used to minimize stormwater impacts. Enclosed is information on LID that can be incorporated into the planning, construction and operation of the proposed projects.

Thank you for providing EPA with the opportunity to review this project. If you have questions regarding these comments, the staff contact for this project is Karen DelGrosso; she can be reached at 215-814-2765.

Sincerely,

William Arguto NEPA Team Leader

Enclosures (3)